

Pseudomonas Aeruginosa in Public Natural Hot Spring Pools of Sareyn County

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Background & Objectives: Considering the importance of *Pseudomonas aeruginosa* (PA) in public health problems as one of the most important microorganisms related to swimming pools, this study did for assessment of natural hot spring pools of Sareyn county in 2012 spring and summer seasons.

Methods: In this study 85 specimens were investigated, from all public natural hot spring pools of Sareyn County at the pick of the swimmers number, from April to September. PA was determined by Presence/Absence test based on "Standard Methods for the examination of water & wastewater" reference book.

Results: Data showed that out of 29.41% all samples in April, 35.29% in May, 35.29% in June, 41.18% in July and 29.41% in August revealed PA. There was no statistically significant difference for PA during months ($p>0.05$).

Conclusion: During the research time, out of 30.53% specimens revealed PA which is a high number in comparison with both Iran and WHO standards (1 > per 100ml sample). So, it is suggested that health monitoring and water disinfection of public hot spring pools considered more than the past. Also, it is necessary to observe the pools capacity about swimmers numbers.

Keywords: Public Natural Hot Spring; *Pseudomonas aroginosa*; Pool